Application No.: 09/652,150 Docket No.: SON-1894

(80001-1894)

AMENDMENTS TO THE CLAIMS

Please amend claims 2, 5, 6, 8, 9, 10, and 11 as set forth below.

1. (CANCELED)

2. (CURRENTLY AMENDED) A camera system having a camera module comprising:

a flexible substrate provided with a through-hole for light transmission; an imaging element having a light receiving portion, wherein said imaging element is flip chip mounted on a first side of the substrate such that the light receiving portion is exposed through the through-hole; and

a lens unit mounted on a second side of the substrate to cover a space over the light receiving portion of the imaging element,

wherein the flexible substrate includes a flexible wiring board and a metal plate affixed to an end portion of the flexible wiring board.

- 3. (CANCELED)
- 4. (PREVIOUSLY PRESENTED) The camera system of claim 2, wherein the imaging element has the light receiving portion on a first side and a shielding layer on a second side opposite to the first side.
 - 5. (CURRENTLY AMENDED) An imaging device comprising:

a substrate; and

an imaging element having a light receiving portion on a first side, and a shielding layer on a second side that is opposite the first side, wherein said imaging element is flip chip mounted on the substrate such that said first side is opposed to the substrate substrate,

wherein the substrate includes a flexible wiring board and a metal plate affixed to an end portion of the flexible wiring board.

6. (CURRENTLY AMENDED) An imaging device comprising: a substrate having a through-hole for light transmission; and

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an imaging element having a light receiving portion on a first surface, wherein said imaging element is flip chip mounted on one side of the substrate such that the light receiving portion is exposed through the through-hole; and

a shielding layer on a back surface of the imaging element, wherein said back surface is opposite to the first surface of the imaging element having the light receiving portion,

wherein the substrate includes a flexible wiring board and a metal plate affixed to an end portion of the flexible wiring board.

- 7. (PREVIOUSLY PRESENTED) The imaging device according to Claim 5, wherein a black resin is applied to the periphery of the imaging element including a connecting portion located between the substrate and the imaging element by the flip chip mounting to cover the side surface and the back surface of the imaging element, and wherein a portion of the resin is the shielding layer.
 - 8. (CURRENTLY AMENDED) A camera module comprising:
 - a substrate having a through-hole for light transmission;

an imaging element having a light receiving portion on a first surface of the imaging element and a shielding layer on a back surface of the imaging element, wherein said imaging element is flip chip mounted on a first side of the substrate such that the light receiving portion is exposed through the through hole; through-hole; and

a lens unit mounted on a second side of the substrate substrate,

wherein the substrate includes a flexible wiring board and a metal plate affixed to an end portion of the flexible wiring board.

9. (CURRENTLY AMENDED) A camera system using a camera module comprising:

a substrate having a through-hole for light transmission;

an imaging element having a light receiving portion on a first surface of the imaging element and a shielding layer on a back surface of the imaging element, wherein said imaging element is flip chip mounted on a first side of the substrate such that the light receiving portion is exposed through the through hole; through-hole; and

a lens unit is mounted on a second side of the substrate,

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wherein the substrate includes a flexible wiring board and a metal plate affixed to an end portion of the flexible wiring board.

10. (CURRENTLY AMENDED) An optical system having an optical module, said optical module comprising:

a flexible substrate provided with a through-hole;

an optical element having an optical portion that is flip chip mounted on a first side of the flexible substrate such that the optical portion is exposed through the through-hole;

a lens unit mounted on a second side of the substrate to cover a space over the optical portion of the optical element; and

a system module connected to the flexible substrate in the optical module, wherein integrated circuits are mounted on the system module.

wherein the flexible substrate includes a flexible wiring board and a metal plate affixed to an end portion of the flexible wiring board.

11. (CURRENTLY AMENDED) The optical system of elaim 10, wherein the optical element is a light emitting element.